Dr. DEER

PRESENTED BY DELORME

BY DR. JAMES C. KROLL



A well-balanced nutritional strategy can benefit from the use of supplemental feed, and the results can often be seen in antler growth. PHOTO COURTESY OF DR. JAMES C. KROLL.

NEED FOR FEED PART 1

There are more than a few "hot button" issues in deer management, but supplemental feeding is certainly near the top of the list. Is there a place for supplemental feed in a whitetail management program? In this two-part series, I will discuss the facts behind the issues and attitudes, as well as make recommendations on how to properly supplement the diet of whitetails where feeding is legal.

FEEDING VS. BAITING

Though I have been helping landowners manage their deer in Michigan for more than 20 years, I will never forget my first experience in the Wolverine State. I was invited to give a talk near Rogers City on deer management. To my delight, about 300 people showed up. It turned out these people were desperate for information about deer management. A significant portion of the talk concerned whitetail nutrition, with suggestions for supplementing the diet of Michigan deer.

Touring the northern Lower Peninsula, I learned it was common practice for hunters to use bait during the hunting season. At any convenience store, one could buy sugar beets, carrots, corn on the cob and a host of other "deer delights."

But many of these folks were confusing baiting with feeding deer, and there was little attention being paid to the nutritional value of the supplemental food they were providing.

Eventually, biologists managed to limit the amount of bait a hunter could use, then eliminate feeding entirely. Problem solved!

There is a huge difference between feeding deer as part of a sound management program and trying to bait them into a place to be shot. The purpose of the latter is obvious: The hunter wants to put the odds in his favor. But the purpose of feeding deer should be to balance out the nutritional needs of your deer, in the context of a sound nutrition program.

It is always critical to use natural forage as the basis for your nutritional program, but if it is legal in an area, I add in supplemental feeding to fill in the nutritional limitations caused by such things as climate and soil.

Once you have your herd "clicking" at optimum recruitment, the next step is supplementation. Most of the time, sub-par nutrition is the most limiting factor to better antlers and fawn crop. There are two ways to supplement nutrition — food plots and supplemental feed. Food plots certainly are the least expensive way to supplement, since a pound of food plot forage costs about 2 cents, while feed averages 35 cents per pound. Yet, there are many areas where it is not possible to grow food plots or where there normally is adequate rainfall, there is always the specter of drought! So, even for properties with the climate for food plots, I usually include supplemental feeding (where legal).

A GOOD DEER FEED?

A good deer feed should supply protein, carbohydrates, fats and minerals at proper levels, but based on the inquiries I receive, land managers are most curious about protein levels.

We classify any nutritional need of whitetails into two categories: maintenance and optimum. The maintenance level is what it takes for a deer of a certain age and sex to get by. Conversely, when you are managing your herd to produce the best possible antler growth, you need to know what is optimum.

Whitetails not only are marvelously adapted to make do with little, they also have the ability to "overlook" excess. Most studies have demonstrated time and again, the optimum protein level for the average deer is around 17 percent crude protein. The older a deer gets, the less protein it needs. Fawns and yearlings often need a higher percentage of protein.

Unlike humans, whitetail deer want to be fat! Deer will utilize what amounts to a reverse Atkins diet, stocking op on carbohydrates in forms like sugars and cellulose, hemicellulose to create fat reserves that can be easily used for energy when needed. So, a feed with adequate protein and carbohydrates will allow deer to do quite well.

So, a feed that is 3-4 percent fat is adequate. A good rule-of-thumb is to balance fiber content against protein. For example, if a deer feed offers 17 percent protein, you should have 13 to 15 percent fiber.

Whereas protein tends to get the most attention, minerals are perhaps the most overlooked feed component. The mineral needs of whitetails often are different from those of domestic livestock.

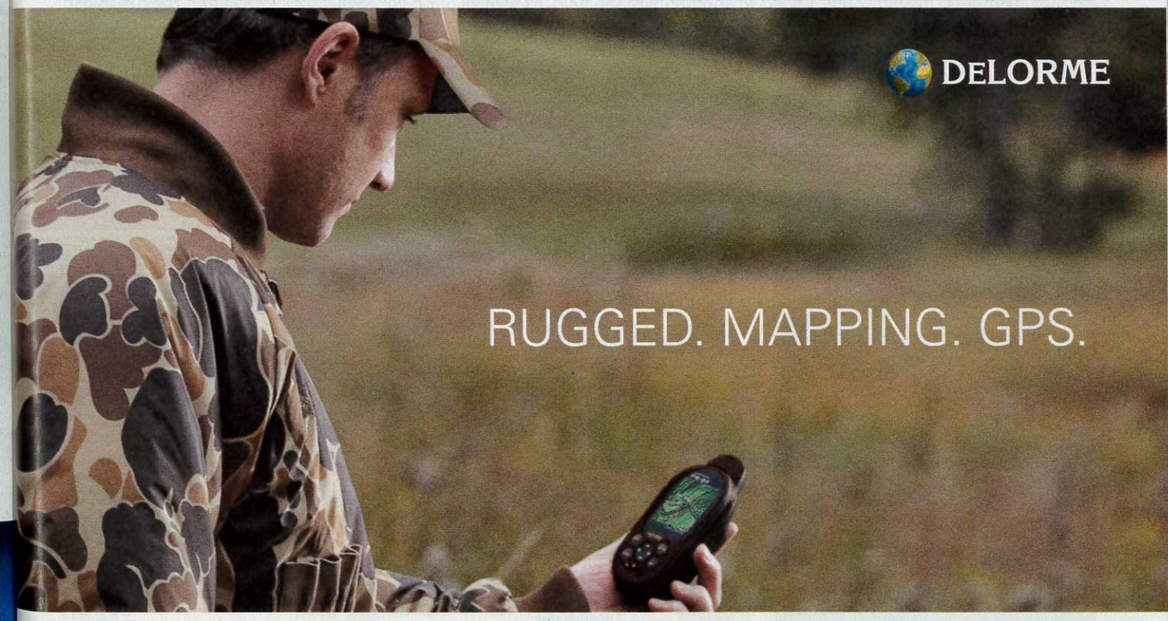
Of the host of macro- and micronutrients needed by deer, the two most critical are phosphorus and sodium. Sodium is important for many physiological activities, such as electrolyte balance, muscle and nerve conduction, blood buffering, etc. There have been solid scientific studies indicating body size, antler development and fawn production are tied to dietary phosphorus. Calcium, another critical mineral, affects phosphorus availability, with the ratio of these two minerals in food just as important as the amount of each present. In general, a 2:1 to 1:1 calcium-to-phosphorus ratio is optimal. The actual amount of phosphorus needed depends on sex, age and season but is thought to range from 0.2-0.4 percent in the diet. This said, we recommend higher levels of phosphorous and calcium in our feed, since it is a supplement.

(Continued on page 128)

WINCHESTER AMMUNITION
DR. DEER
By North American Whitetail

WANT MORE OF DR. KROLL'S INSIGHTS ON DEER?

If you're really into whitetails, check out *Winchester Ammunition Dr. Deer*, which is airing through late September on Sportsman Channel. For air times, visit www.thesportsmanchannel.com.

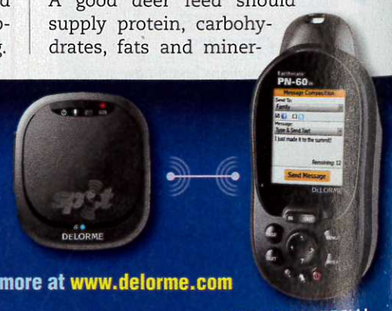


Depend on Earthmate GPS for the right combination of rock-solid design and reliable navigation. Waterproof, impact-resistant, WAAS-enabled for 3-meter accuracy, with battery-saving power management. DeLorme topo and street maps included, aerial imagery and nautical charts available. Also supports Navionics. DeLorme is a Service-Disabled, Veteran-Owned Small Business.

Lead. Don't Follow.

DELORME

DELORME'S NEW EARTHMATE PN-60W with SPOT Satellite Communicator offers cutting edge GPS capabilities, along with a revolutionary twist — the ability to communicate via satellite from locations that offer absolutely no cell phone service.



Learn more at www.delorme.com

Dr. DEER

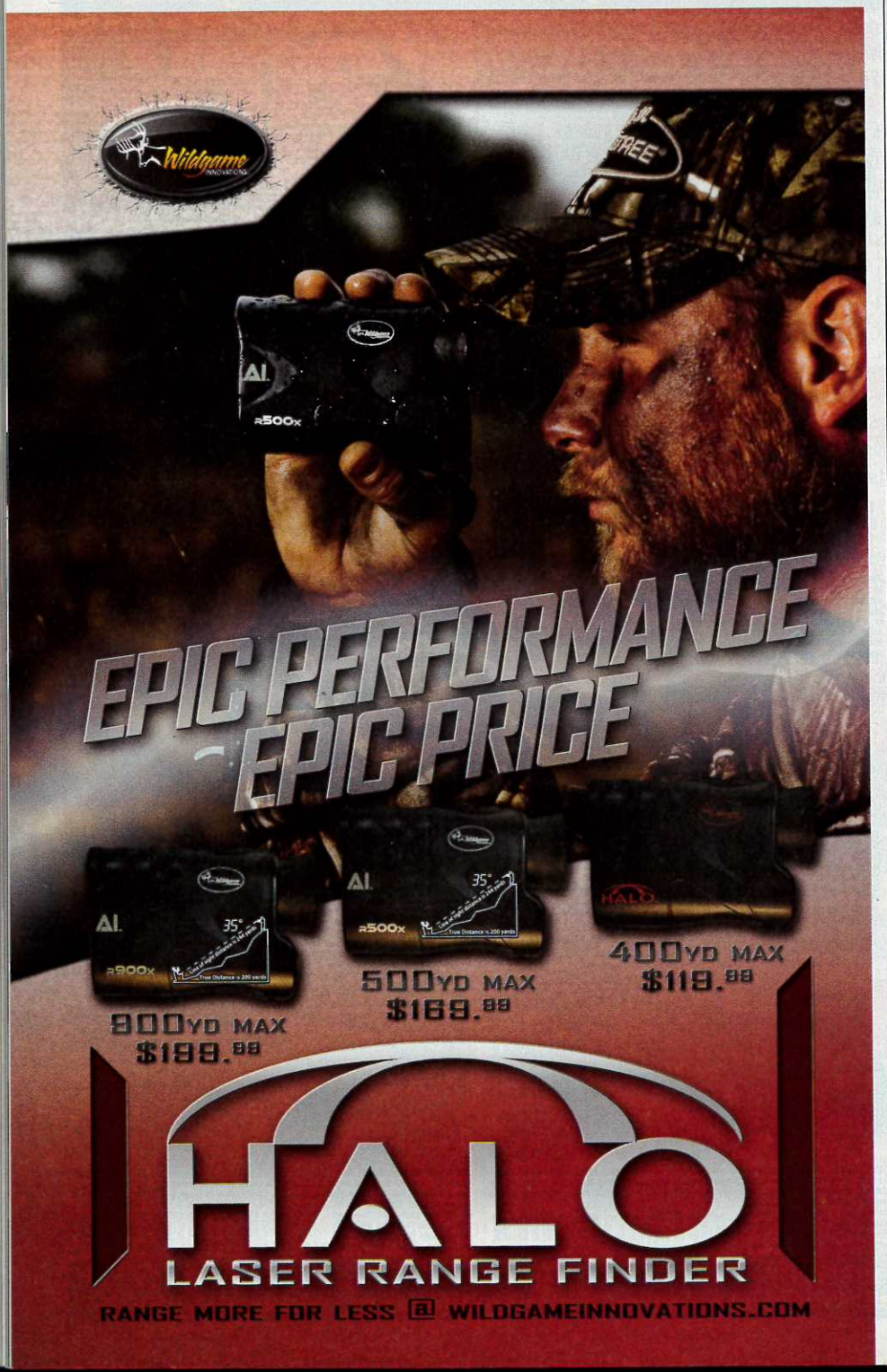
(Continued from page 125)

Micro-nutrients such as zinc, selenium, copper and cobalt can be limiting. We use the term "micro-nutrients" to emphasize they are needed in small quantities. Selenium is a great example. This mineral is critical to cell division, sperm production, antioxidant enzymes and antler development.

As you can see, providing a quality feed to whitetails is not a simple matter. There are many good deer feeds on the market, and I urge you not to tinker with deer diets by concocting your own "special formula."

Remember: all of the elements that make up an optimal whitetail diet are important, but rather than focus on individual pieces of the dietary puzzle, it is much more valuable to seek out a balanced ration!

Next month, we'll continue our discussion of supplemental feeds by examining the best strategies for building a sound feeding program.



ON TARGET

(Continued from page 12)

energy. At the same time, they will lose speed faster the farther downrange they travel.

Many people have the misconception that a crossbow arrow has a flat trajectory similar to a rifle. To be accurate, the archer must know his or her distance from the animal and use the correct pin setting, the same as required with a vertical bow.

Most crossbows are heavier than guns, which can cause some people difficulty when aiming. To help correct this problem, TenPoint Crossbows has developed a device called a Steady Eddy. It is an adjustable rod that can be fastened to the front of the bow and rest against the chest or waist of the shooter. The device redistributes the weight load, so the arms do not have to hold as much poundage.

I observed the top crossbow archers competing at the NAA championship. These skilled shooters bent their bow arm so the elbow made contact with their rib cage and rested the bow's forearm in the palm of their hand. This posture worked on the same principle as the Steady Eddy.

Most horizontal bows have a much heavier trigger pull than a firearm. A shooter must add stronger pressure to create a discharge. Care must be taken not to jerk the trigger, causing the bow to move and affect the precision.

Crossbows are much simpler and easier to shoot accurately than a regular bow. The first time my wife shot one, she placed both arrows in an inch-wide circle at 15 yards. During the next two years she made three clean kills on three attempts. The crossbow has made it possible for us to share and enjoy our hunts together.

The crossbow has been around since 400 BC. It was first allowed for deer hunting in the 1970s by the state of Ohio, and in 1982, it gained full archery status there.

Since then, the crossbow has been accepted by many states as a legal archery weapon. These changes have provided new opportunities for people to know the thrill of being with Mother Nature. Hunting is not about the kill; it is about enjoying the experience and creating the memories as we adventure into the out-of-doors.